Crestron DM-RMC-100

DigitalMedia™

DigitalMedia™ Room Controller

> DigitalMedia receiver and display controller

> Low-profile design

> Easy setup and diagnostics

> Mounts to a 2-gang, 4" square, or Euro electrical box

> Meets requirements for plenum-rated ceilings

> HDMI display output

> USB HID keyboard/mouse port

> 10/100 Ethernet LAN port

> RS-232, IR, digital in, & relay control ports

> Optional power current sensor

The DM-RMC-100 provides a convenient one-box interface solution to support a single display device as part of a complete DigitalMedia system. It functions as a DM receiver and control interface, providing a single HDMI output along with a variety of control ports. Its compact, low-profile design allows the DM-RMC-100 to be installed discreetly behind a flat panel display or above a ceiling mounted projector. The connection to the head end requires just one DigitalMedia cable, with a potential cable length of up to 450 feet*.

The video and audio connection on the DM-RMC-100 consists of a single HDMI digital AV output port, supporting HDMI 1.3 with Deep Color, 1080p/60 HDTV and WUXGA computer resolutions, HD lossless audio, full HDCP support, and CEC device control - all through a single HDMI cable. In addition, there are RS-232 and IR control ports provided for device control if needed. Two relays are included for screen and lift control, and an optional current sensor or motion sensor may be connected to the SENS input.

The USB HID port allows a mouse/keyboard or game controller to be connected, enabling full control of a centralized source device (i.e. computer, game console, media server, etc.) located at the equipment rack. And finally, the LAN jack provides a high-speed connection to the DM LAN to support an Ethernet-equipped display or other device.

An array of indicators on the front of the DM-RMC-100 provides for easy setup and troubleshooting, verifying the status of connections and signal activity at a glance.

The DM-RMC-100 mounts to a standard 2-gang, 4" square, or 85mm European electrical box, and sticks out only one inch from the wall surface. Connections to the display are all positioned along the bottom edge of the receiver, allowing cables to be dressed neatly without obstruction. The DM and LAN connection are made behind the unit within the electrical box.

SPECIFICATIONS

Video

Signal Types: HDMI 1.3 w/Deep Color w/HDCP 1.1 copy protection protocol

Audio

Signal Types: HDMI 1.3 supporting HD lossless multi-channel up to 7.1

Connectors – Front

SENS: (1) 2-pin 3.5mm detachable terminal block;
Digital/contact closure sensing input;
Rated for 0-24 Volts DC, referenced to GND;
Input Impedance: 2.2k ohms pulled up to 5 Volts DC;
Logic Threshold: 2.5 Volts DC nominal with 1 Volt hysteresis band

HDMI: (1) 19-pin Type A HDMI female;
HDMI digital video/audio output

USB: (1) USB Type A female;
USB 1.1 port for mouse, keyboard, game controller, or other USB HID device

RELAY 1 – 2: (1) 4-pin 3.5mm detachable terminal block comprising
(2) normally open, isolated relays;
Rated 1 Amp, 30 Volts AC/DC;
MOV arc suppression across contacts

COM: (1) 5-pin 3.5mm detachable terminal block, bidirectional RS-232 port;
Up to 115.2k baud, hardware and software handshaking support

IR 1 – 2: (1) 4-pin 3.5mm detachable terminal block comprising (2) IR/Serial ports;
IR output up to 1.1 MHz;
1-way serial TTL/RS-232 (0-5 Volts) up to 19200 baud

Connectors – Rear

LAN: (1) 8-wire RJ45 females;
10BaseT/100BaseTX Ethernet port

DM INPUT: (1) DM input composed of (2) 8-pin RJ45 female, shielded;
Connects to DM output of a DM switcher, transmitter, or other DM device
via DM-CBL or CresCAT-D cable*

24 A B G: (1) 4-pin 3.5mm detachable terminal block, DMNet port;
Connects to DMNet port of a DM switcher, transmitter, or other DM
device via DM-CBL or CresCAT-D cable*

Controls & Indicators

PWR: (1) green LED, indicates operating power supplied via DMNet
DM LINK: (1) green LED, indicates connection to an upstream DM device
VIDEO: (1) red/green dual-color LED, indicates video signal presence and lock status
CNTRL: (1) red/green dual-color LED, indicates Ethernet connection and control system communication status
SETUP: (1) red LED and (1) miniature recessed pushbutton, for Ethernet auto-discovery

Power Requirements

DMNet Power Usage: 6 Watts (0.25 Amps @ 24 Volts DC)

CRESTRON®

Environmental

Temperature: 41° to 104°F (5° to 40°C)
Humidity: 10% to 90% RH (non-condensing)

Enclosure

Chassis: Steel, black matte powder coat finish
Mounting: 2-gang, 4" square, or 85mm European electrical box mountable

Dimensions

Height: 4.54 in (11.52 cm)
Width: 5.15 in (13.08 cm)
Depth: 1.41 in (3.58 cm)

Weight

13.8 oz (392 g)

AVAILABLE ACCESSORIES

CNSP-XX
Custom Serial Interface Cable

IRP2
IR Probe

CNXRMCS
Current Sensor

DM-CBL
DigitalMedia™ Cable

DM-CONN
DigitalMedia™ Cable Connector

* For DigitalMedia wiring, use DM-CBL DigitalMedia Cable, CresCAT-D, or quality CAT5e/CAT6 cable. Do NOT use low-skew cable. The maximum allowable cable length depends on multiple factors. One or more DM Repeaters (Model DM-DR) may be required. Refer to the Crestron DigitalMedia Design Guide, Doc. #4789 for complete wiring guidelines.